

Notes on Washington Plants

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Since the appearance of that monumental work of its time, "Flora of the State of Washington," by Piper (1), a number of species have been added to the known flora of Washington. Many of these subsequent discoveries were incorporated in floras by Piper and Beattie (2, 3) covering the southeastern and western parts of the state. More recently St. John, in a revision (4), has added other species from southeastern Washington. Jones, in two local catalogues covering the Olympic Peninsula (5) and Mount Rainier (6), has contributed other species not previously reported from Washington.

The following list contains forty species apparently not previously reported from Washington State. It is possible that some of these may have been previously reported in monographs or brief papers on local areas, at least they do not occur in the publications mentioned above. Unless indicated otherwise, the specimens were collected in Whatcom County by the writer and are deposited in the herbarium of Cornell University.

Gramineae

Setaria verticillata Beauv. An introduced weed in gardens and fields in the Nooksack River Valley.

Pontederiaceae

Heteranthera dubia (Jacq.) MacM. Abundant in 1 to 2 meters of water in Silver Lake. The gall-forming organism, *Sorodiscus Heterantherae* Wernham, was found on the roots and stem bases of this aquatic plant. Although the host has been reported from eastern Washington, this is the first record of *Sorodiscus Heterantherae* from west of New York.

Salicaceae

Salix alba L. var. *vitellina* (L.) Koch. Established on the lowlands near the mouth of the Nooksack River.

Salix purpurea L. Established along streams and ditches; Marietta; Squalicum Lake.

Polygonaceae

Polygonum Sachalinense Schm. Established in waste places and along roadsides near Bellingham. Introduced from the Orient and frequently planted as an ornamental.

Polygonum scabrum Moench. A weed in gardens and about farmyards near Lynden.

Rumex Acetosa L. Introduced and grown in gardens for "greens." Established in wet meadows near Ferndale.

Caryophyllaceae

Dianthus deltoides L. Established on grassy banks; Bellingham; Skagit River Valley.

Dianthus barbatus L. Established on dry grasslands; Blaine; Marietta.

Nymphaeaceae

Nymphaea tetragona Georgi subsp. *Leibergi* (Morong) Porsild. In sluggish stream and pond near Ferndale.

Nymphaea tuberosa Paine. Infrequent in Squalicum Lake; probably introduced.

Fumariaceae

Fumaria officinalis L. A weed in fields of peas and vetch; Lummi Island.

Cruciferae

Erucastrum gallicum Schulz. A weed of waste ground and along railroad tracks in South Bellingham; probably recently introduced with grain from farther east.

Euclidium syriacum (L.) R.Br. A low spreading weed about a farmyard and along a driveway in an orchard, Naches Heights, Yakima County. According to Dr. R. T. Clausen, who kindly made the determination, this native of Central Europe appears not to have been reported before from the United States.

Lunaria annua L. Escaped on waste banks along Bellingham Bay.

Crassulaceae

Sedum acre L. Established in many localities on dry sandy or gravelly soil; Marietta, Semiahmoo, Lynden, Bellingham.

Sedum triphyllum S. F. Gray. Established in grasslands near Lynden.

Saxifragaceae

Saxifraga saximontana E. Nels. On rocky slopes in alpine meadows of the Cascade Mountains in Whatcom and Okanogan Counties.

Rosaceae

Potentilla emarginata Pursh. On rocky ledges above timber line on Skyline Ridge.

Linaceae

Linum micranthum Gray. On dry grassy bank, Bellingham, A. R. Roos.

Oxalidaceae

Oxalis europaea Jord. Escaped from gardens and established on waste places in several places in Whatcom County.

Geraniaceae

Geranium Robertianum L. Introduced and established along the edge of a wooded pasture near Sumas.

Euphorbiaceae

Euphorbia Helioscopia L. On sandy soil in gardens and along roadside, Chuckanut Bay.

Balsaminaceae

Impatiens Roylei Walp. Established on spring-fed, shaded slopes south of Bellingham.

Boraginaceae

Symphytum asperum Lep. Established in grasslands on dry gravelly soil; Blaine; Kendall.

Labiatae

Galeopsis Tetralit L. Established and widespread along fence rows and edges of woods; Ten Mile; Sumas; Baker Lake.

Lamium maculatum L. Escaped from cultivation to partially shaded banks; Ten Mile; Stetattle Creek.

Solanaccae

Lycium halimifolium Mill. Established on sandy banks; Point Roberts; Marietta.

Scrophulariaceae

Linaria macedonica Griseb. Established in dry gravelly soil near Kendall, Whatcom County; a weed near Kittitas, Kittitas County, *A. R. Kirk*, 1939.

Veronica hederifolia L. Established on grassy slopes in the Snake River Canyon near Almota, Whitman County.

Valerinaceae

Valeriana officinalis L. Established along roadside near Lynden.

Cucurbitaceae

Echinocystis lobata T. and G. Established along fence rows and in waste places; Sumas; Wisner Lake; Lynden.

Campanulaceae

Campanula rapunculoides L. Established in grasslands along roadsides and fences near Custer.

Compositae

Artemisia caudata Michx. In sandy soil along beach; Blaine; Point Roberts.

Centaurea maculosa Lam. Becoming widespread in grasslands on dry gravelly soil in Whatcom County.

Centaurea diffusa Lam. A spreading weed, along roadside ditches and in fields near Twisp, Okanogan County.

Cirsium arvense (L.) Scop. var. *mitis* Wimm and Grab. A weed in waste places, Bellingham.

Helianthus tuberosus L. Established in waste places; Bellingham; Kendall.

Hieracium aurantiacum L. This European weed which has become so troublesome in pastures in the northeastern United States has been introduced into rock gardens in western Washington. During the last ten years it has been passed around until it has spread by seed from rock gardens and has become established in grasslands in several places in Whatcom County.

Lactuca canadensis L. In gravelly grasslands and open woodlands near Kendall; apparently introduced.

REFERENCES CITED

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2. Piper, C. V. and Beattie, R. K. Flora of the Northwest Coast. 418 pp. 1915.
3. Piper, C. V. and Beattie, R. K. Flora of Southwestern Washington and adjacent Idaho. 296 pp. 1914.
4. St. John, Harold. Flora of Southeastern Washington and adjacent Idaho. Pullman, Washington. 531 pp. 1937.
5. Jones, G. N. Botanical Survey of the Olympic Peninsula, Washington. Univ. of Washington Publ. in Biology. 5: 288 pp. 1936.
6. Jones, G. N. The Flowering Plants and Ferns of Mount Rainier. Univ. of Washington Publ. in Biology. 7: 192 pp. 1938.

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 BOOK REVIEWS

A new edition of a standard manual*

GEORGE T. HASTINGS

When Rehder's *Manual of Cultivated Trees and Shrubs* appeared in 1927 it became almost at once a standard work essential to everyone working with woody plants in the United States. In the years since its publication new plants have been introduced, new varieties and hybrids have been developed, some changes in names have been necessitated by amendments to the International Rules of Botanical Nomenclature, and critical study of species has resulted in changes. All these are incorporated in the new edition, bringing the *Manual* up to date. Some 200 more species are added, with a corresponding increase in the number of varieties and hybrids. The map showing zones of hardiness, too small to be used conveniently, has been redrawn and printed in two colors as a full page plate. Seven instead of eight zones are recognized, but the reduction is practically to six zones as I, the treeless area of

* *Manual of Cultivated Trees and Shrubs*. Second Edition, Alfred Rehder. xxx + 996 pages. The Macmillan Company. 1940. \$10.50.